

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 1 and 4 as follows:

Listing of Claims

1. (Currently Amended) An image pick-up apparatus comprising:

a solid-state image pick-up device for performing photo-electric conversion in accordance with a received image pick-up light;

switching means for performing switching between first mode serving as image pick-up mode where charges stored in the solid-state image pick-up device are readout every n (n is natural number) frames to output a CCD (Charge Coupled Device) output signal and second mode serving as image pick-up mode where charges are stored in the solid-state image pick-up device are readout every m (m is natural number) fields to add odd charges and even charges which are adjacent in a vertical direction of the charges which have been readout while changing the combination thereof every m fields to output a CCD (Charge Coupled Device) output signal;

storage means for storage of the output CCD output signals from the image pick-up device;

control mean for controlling the switching means in such a manner to switch the image pick-up mode of the image pick-up apparatus into the first mode in accordance with image pick-up request at a low output sensitivity, and to switch the image pick-up mode of the image pick-up apparatus into the second mode in accordance with image pick-up request at a high output sensitivity; and

timing generating means for controlling readout of the output CCD output signals from the image pick-up device and for controlling storage and output of the storage means,

wherein at every frame in the first mode or at every field in the second mode, during non-readout of the image pick-up device, the storage means outputs a same CCD output signal ~~generating a signal (a) during a first time period to read out the charges stored in the solid-state image pick-up device every n or m frames, depending upon being in the first or second modes, and to store the read out charges in a storage means and (b) during a second time period to not read out the charges from the solid-state image pick-up device and to output the charges stored in the storage means after every frame.~~

2. (Original) The image pick-up apparatus as set forth in claim 1, comprising:
gain adjustment means for adjusting gain of an image pick-up signal outputted from the solid-state image pick-up device,

wherein the control means controls the switching means so as to switch the image pick-up mode of the image pick-up apparatus into either the first mode or the second mode in accordance with the gain adjusted by the gain adjustment means.

3. (Original) The image pick-up apparatus as set forth in claim 1,
wherein the control means controls the switching means so as to switch the image pick-up mode of the image pick-up apparatus into either the first mode or the second mode in accordance with storage time of the charges stored in the solid-state image pick-up device.

4. (Currently Amended) An image pick-up method comprising:

performing photoelectric conversion by a solid-state image pick-up device in accordance with a received image pick-up light;

performing switching into first mode serving as image pick-up mode where charges stored in the solid-state image pick-up device are readout every n (n is natural number) frames in accordance with image pick-up request at a low output sensitivity to output a CCD (Charge Coupled Device) output signal;

performing switching into second mode serving as image pick-up mode where charges stored in the solid-state image pick-up device are readout every m (m is natural number) fields in accordance with image pick-up request at a high output sensitivity to add odd charges and even charges which are adjacent in a vertical direction of the charges which have been readout while changing the combination thereof every m fields to output a CCD (Charge Coupled Device) output signal, thus to perform image pick-up operation; and

performing control of readout the CCD output signals from the image pick-up device and performing control of storage and output of the CCD output signals for a storage means, wherein at every frame in the first mode or at every field in the second mode, during non-readout of the image pick-up device, the storage means outputs a same CCD output signal.

~~generating a signal (a) during a first time period to read out the charges stored in the solid-state image pick-up device every n or m frames, depending upon being in the first or second modes, and to store the read-out charges in a storage means and (b) during a second time period to not read out the charges from the solid-state image pick-up device and to output the charges stored in the storage means after every frame.~~

5. (Original) The image pick-up method as set forth in claim 4, comprising:

adjusting gain of an image pick-up signal outputted from the solid-state image pick-up device to switch the image pick-up mode into either the first mode or the second mode in accordance with the adjusted gain to perform image pick-up operation.

6. (Original) The image pick-up method as set forth in claim 4, comprising:
switching the image pick-up mode into either the first mode or the second mode in accordance with storage time of the charges stored in the solid-state image pick-up device to perform image pick-up operation.

7. (Previously Presented) The image pick-up apparatus set forth in claim 1, further comprising an image processing means for processing the charges output from the solid-state image pick-up device during the first time period and for processing the charges output from the storage means during the second time period.

8. (Previously Presented) The image pick-up method as set forth in claim 4, further comprising processing the charges output from the solid-state image pick-up device during the first period and processing the charges output from the storage means during the second time period.